

## CLAIMS

What is claimed is:

1. A flow control method for VC-Trunks in metropolitan-area network equipment comprising the following steps:
  - A) determining whether a service data packet block existing at a VC-Trunk of a receiving-end transmission equipment, if so, sending out a flow control packet with a VC-Trunk tag ;
  - B) according to the VC-Trunk tag in the flow control packet, pausing service data packets of the VC-Trunk forwarding at a transmission equipment that has received said flow control packet, until timing brought in by the flow control packet expires and no other new flow control packet is received.
2. The flow control method according to Claim 1, wherein step (B) further comprising, initiating flow control timer at the transmission equipment that has received said flow control packet; determining whether said flow control timing is ended, if it is not, then waiting.
3. The flow control method according to Claim 1, wherein step (A) further comprising, initiating control timer at the receiving-end transmission equipment and sending said flow control packet in a timing manner until said service data packet block is disappeared.

4. The flow control method according to Claim 1, wherein step (A) comprising, on the downlink of the service data packets, calculating individually the number of the received service data packets of every VC-Trunk at receiving-end transmission equipment; determining whether said number is excess a preset flow control threshold, if it is, sending the flow control packet to sending-end transmission equipment.

5. The flow control method according to Claim 1, wherein step (A) comprising, on the uplink of the service data packets, determining whether a FIFO buffer of a VC-Trunk at the receiving-end transmission equipment is overflow, if it is, sending said flow control packet to the receiving-end transmission equipment physical port.

6. The flow control method according to Claim 1, wherein VC-Trunk tag as a frame header is added to 802.3x standard pause frame to consist the flow control packet.

7. The flow control method according to Claim 1, wherein VC-Trunk tags correspond to VC-Trunks one by one, and the VC-Trunk tag length is determined by the number of VC-Trunks.